Agile Testing quadrants

The Agile testing is a software testing practice that follows the priniciples of Agile development. There are 4 different quadrants which ensure that the product has met all technological and business needs.

Quadrant 1 is consistent of fully automated unit(small piece of code) and component(components working together) tests. The main goal is to have as much quality as possible and in order to acheive it one must do as many unit test as possible(safety net) and should always refactor to improve design and maintainability. The unit testing is done along with coding by the developer and is supported by a tester who ensure that there is 100% design coverage. Without doubt, missing quadrant 1 makes the others much harder.

Quadrant 2 consists of functional tests, prototypes,simulations and examples, it has automated and manual feautures. Its a business-facing test driven development which helps customers achieve advanced clarity. The testing itself is done with continous integration as the sprint progresses.All functional requirements must be tested - non story is done until tested. Capturing examples and reporting all defects is something crucial in order to accomplish external quality. Making flow diagrams, mind maps – brainstorming as well as mock-ups like paper prototyping is always present when we are talking about the second quadrant.

Quadrant 3 contains exploratory testing, scenarious, usability testing and user acceptence testing(fully manual). Its purpouse is to recreate the actual user experiences while creating all kind of demos with customers. This includes , for instance, iteration reviews which build confidence and provides quick feedback or pair exploratory testing with customers(even on unfinised code). In the exploratory one testers are involved as less as possible in planing and as much as in test execution, critical thinking and careful observation are necessary. It is described as simultanious learning, test design and test execution. The scenario testing on the other hand is using hypothetical stories with realistic data to help the tester work on complex systems. Usability and UAT testing are using real personas to do some tasks while being observed. The feedback from all of these is taken into consideration and discussed with the team.

The fourth Quadrant uses tests to check thee performance, the stability, reliability, scalability.. etc. Who does these tests depends on priorities because it may need to start scalability early or performance. The automation in quadrant 4 includes the use of native database tools, shell scripting, jConsole for monitoring.. etc.

Last but not least, the system testing comes into play. It is done as the development process progresses and in a Production environment. The complete and integrated software is tested. Its purpouse is to evaluate the sysmet's compliance with its specified requirements. System testing is done after Integration testing and before the acceptance testing.